

Remarks

Applicant has filed the Remarks below in response to the Examiner's rejection of all pending claims in an Office Action issued May 6, 2005. Applicant respectfully requests the Examiner reconsider the amended claims and pass the application into allowance.

Status of the Claims

Claims 6 to 9 and 13 to 15 stand withdrawn. No claims have been amended, added or cancelled. Accordingly, presented herein for Examiner's consideration are claims 1 to 5, and 10 to 12.

The Examiner has rejected claims 1 to 3, 10 and 11 under 35 U.S.C. §103(a) as being as being obvious over U.S. Patent No. 3,532,571 to Ausnit (the '571 patent) in view of U.S. Patent No. 4,291,517 to Lipps (the '1517 patent). Additionally, the Examiner has rejected claims 4 and 12 under 35 U.S.C. §103(a) as being obvious over the '571 patent in view U.S. Patent No. 3,426,396 to Laguerre (the '396 patent) and claim 5 as being obvious over the '571 patent in view of U.S. Patent No. 5,334,127 to Bruno et al. (the '127 patent).

Summary of The Invention

The present invention is an apparatus for opening a bag sealed by a resealable closure. It finds its greatest utility when utilized to open each bag in a string of bags provided by a form, fill and seal (FFS) machine preparatory to placing a filling in the bag through the opening defined by a resealable closure. The present invention comprises a piston-actuated wedge and associated guide means which is operated on each length of the continuous string of bags corresponding to one bag unit to disengage the profiles comprising the resealable closure defining the opening of the bag unit.

The references cited by the Examiner in support of the rejections are summarized next, each in turn, that is, U.S. Patent Nos. 3,532,571 to Ausnit (the '571 patent),

4,291,517 to Lipes (the '1517 patent), 3,426,396 to Laguerre (the '396 patent), and 5,334,127 to Bruno et al. (the '127 patent).

Summary of U.S. Patent No. 3,532,571 to Ausnit (the '571 patent)

U.S. Patent No. 3,532,571 to Ausnit (the '571 patent) issued October 6, 1970 on an application filed June 28, 1967. The '571 patent discloses an apparatus for preparing a continuously extruded web of plastic tubing having attached longitudinally along the wall thereof a closure having pair of interlocking profiles. A portion of the apparatus in one embodiment contains a slitter arm which is inserted into an incision in the wall of a continuous web of tubing, between the disengaged profiles of a closure affixed to the wall of the tubing. The slitter arm provides a knife edge perpendicular to the radial axis of the tube which is directed against the direction of passage of the tube as it emerges from the extrusion/closure attaching portion of the apparatus and propagates an incision in the wall of the tube parallel to the separation line of the interlocking closure profiles. In this manner, a plastic tube having an sealable wall opening is provided. The slitter arm contains also a wedge that, once placed between the disengaged portions of the closure, propagates the disengaged region between the halves of the closure as the closure and tube are passed against the assembly.

The '571 patent does not teach or suggest a device having a piston which functions to insert a wedge into a closure mechanism of a package having a resealable closure to thereby open the closure mechanism.

Summary of U.S. Patent No. 4,291,517 to Lipes (the '1517 patent)

U.S. Patent No. 4,291,517 to Lipes (the '1517 patent) issued September 29, 1981 on an application filed December 14, 1979. The '1517 patent discloses an apparatus for filling open-mouth bags (that is, bags which have no closure mechanism defining the opening of the bag, see the '1517 patent, for example, at col. 1, lines 32 to 50). The '1517 patent apparatus includes a mechanism comprising holding pins for hanging a bag

having a tab with holes along the opening of the bag (see the '1517 patent at col. 2, lines 44 to 47) and a bag opening mechanism designated feature 20 which is described in U.S. Patent No. 4,172,349 (the '349 patent). Feature 20, as described in the '349 patent, comprises an air nozzle to blow open the opening of the bag and a piston actuated arm to move a tongue into the opened bag opening and draw the bag opening taught preparatory to providing a fill into the open bag (see the '349 patent, for example, at col. 3, lines 10 to 16).

Neither of the 1517 patent nor the '349 patent describes nor suggests any device which can be employed to open the engaged closure portion of a bag having an opening defined by a resealable closure.

Summary of U.S. Patent 3,426,396 to Laguerre (the '396 patent)

U.S. Patent No. 3,426,396 to Laguerre (the '396 patent) issued February 11, 1969 on an application filed February 26, 1968 and which claims the priority of a France national application filed March 7, 1967. The '396 patent discloses an apparatus for application of a slider on a continuous strip of a resealable closure, each half of which is bonded to the edges of a folded web of plastic in the production of a continuous strip of plastic bags having an opening defined by a closure. In one embodiment the apparatus has a section containing a wedge and guides which propagates a region of disengagement as the continuous strip of engaged closure is passed against the wedge.

The '396 patent does not teach or suggest a device having a piston which functions to insert a wedge into a closure mechanism of a package having a resealable closure to thereby open the closure mechanism.

Summary of U.S. Patent 5,334,127 to Bruno et al. (the '127 patent)

U.S. Patent No. 5,334,127 to Bruno et al. (the '127 patent) issued August 2, 1994 on an application filed March 1, 1993. The '127 patent discloses an apparatus for separating the two halves of a continuous strip of resealable zipper closure after each half has been tack welded to the inside edge of one side of a folded plastic web enveloping the engaged halves of the continuous closure strip. The apparatus comprises a wedge oriented perpendicular to the direction of travel of the web and closure strip, which has been inserted into a disengaged section of the continuous strip of zipper closure. The narrow edge of the wedge faces against the direction of travel of the zipper closure continuous strip and is disposed such as the closure strip is drawn past the wedge it propagates the region of disengagement in the closure strip.

The wedge itself has a length that approximately equals the width of the closure strip and is appended to the end of an "L"-shaped support such that it forms, together with the support, a "Z"-shaped assembly (see Figure 3a, wedge 26c and "L"-shaped support comprising legs 26b and 26a). The configuration and dimensions of this assembly are critical to provide for separation of the continuous strip of zipper closure and not intercept the tack welds holding the zipper strip halves to their respective sides of the folded web of plastic sheet as the tack welded web and zipper closure strip stream past the wedge of the apparatus (see the '127 patent at col. 2, lines 55 to 58, col 2, line 67 to col. 3, line 10, and col. 3, lines 20 to 27). Accordingly, the width of the wedge is only that of the closure strip.

The '127 patent does not teach or suggest a device having a piston which functions to insert a wedge into a closure mechanism of a package having a resealable closure to thereby open the closure mechanism.

Discussion of the Pending Claims**In View of the Cited References Under 35 U.S.C. §103**

The pertinent part of U.S.C. § 103 states:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains...

To establish a prima facie finding of obviousness, the prior art references cited must teach or suggest all the claim limitations (MPEP § 2143). It is well established in the law that obviousness can not be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion or incentive to do so, *In re Richard P. Andros, Jr.*, 988 F.2d 131, 134, (Fed Cir. 1993), 28 U.S.P.Q 2D (BNA) 1146, citing *ACS Hospital Sys., Inc. v Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 993 (Fed. Cir. 1984).

Accordingly, for claims 1 to 3, 10 and 11 to be held obvious over U.S. Patent No. 3,532,571 to Ausnit (the '571 patent) in view of U.S. Patent No. 4,291,517 to Lipes (the '1517 patent), or for claims 4 and 12 to be held obvious over the '571 patent in view U.S. Patent No. 3,426,396 to Laguerre (the '396 patent), or for claim 5 to be held obvious over the '571 patent in view of U.S. Patent No. 5,334,127 to Bruno et al. (the '127 patent), the combined disclosure of the cited patents must teach or suggest each and every element of the rejected claim.

Regarding the Examiner's rejection of claims 1 to 3, 10, and 11, in the present action the Examiner has mischaracterized the disclosure of the '571 patent as teaching inserting a wedge into a zipper closure to disengage the zipper closure. As discussed above, the '571 patent does not describe or suggest inserting a wedge into zipper closure mechanism to thereby open the closure mechanism. As discussed above, the '571 patent describes drawing the two halves of a disengaged portion of a continuous strip of zipper

closure across a wedge oriented perpendicular to the zipper closure in an apparatus comprising a wedge and blade assembly which has been positioned between the separated halves of a continuous strip of zipper closure that has been bonded to an underlying plastic tube. The '571 patent further describes drawing the zipper closure halves of the continuous strip of zipper closure and underlying tube across this assembly such that the engaged portion of the zipper assembly upstream of the wedge are then drawn forward onto the wedge, separating as they approach the wedge, which occurs because the wedge exerts leverage action against the engaged portion of the zipper closure through the unengaged portions of the zipper closure being drawn over it. The action of drawing the disengaged portion of a zipper closure across a wedge to propagate the region of disengagement is fundamentally different than disengaging an engaged closure by insertion of a wedge into the engaged zipper closure.

As the Examiner has pointed out, the wedge described in the '571 patent has appended parallel to it a shoe area (46), and appended perpendicular to the shoe area, a slitter blade (47) (see the '571 patent, Figure 5). The wedge and shoe area are disposed parallel to each other, with the shoe area extending linearly beyond the wedge, and the slitter blade disposed in a region of the shoe beyond the wedge, perpendicular to the wedge. Thus, with the wedge inserted into the region between the separated zipper closure halves, the slitter blade resides in a slit in the tube wall and the shoe resides within the tube. The slitter blade is disposed, relative to the direction of travel of the tube, upstream of the shoe. The wedge resides outside of the plastic tube between the disengaged halves of the zipper closure. As the tube with attached zipper closure is passed across the wedge/shoe/slitter-blade assembly, the slitter blade places an incision in the tube wall beneath and beside the closure assembly. The two portions of the tube on either side of the slit are supported by the shoe assembly as the tube and closure assembly are directed between pinch rollers to re-engage the closure halves which were separated by the wedge to accommodate the arm supporting the slitter blade.

The shoe assembly does not guide the wedge, it guides and supports the two halves of the tube after they are slit apart. Accordingly, mounting the assembly described in the '571 patent on a piston actuated arm, as the Examiner has suggested, in an attempt to insert the assembly into an engaged zipper closure would have the effect of impinging the zipper closure with the shoe area and broad side of the slitter blade, which would not result in disengagement of the zipper closure. Moreover, in such an assembly, the wedge would be oriented sideways from the orientation of the present piston-actuated wedge assembly. This is to say that if the wedge taught in the '571 patent were mounted on a piston-actuated rod to impinge an engaged closure assembly, it would be presented to the closure in an orientation such that the wedge would not be inserted into the closure. As taught in the '571 patent, the wedge assembly can only be inserted between a disengaged portion of the closure and used to propagate the region of disengagement as the closure is passed against the wedge. The wedge described in the '571 patent is not oriented properly to the closure to be inserted into a closure to disengage it. Accordingly, the '571 patent contains no teaching or suggestion that a zipper closure can be disengaged by plunging the assembly taught therein into an engaged section of the closure.

As described above, the '1517 patent does not describe or suggest any assembly which can be inserted into a resealable zipper closure to disengage it. The Examiner has mischaracterized the teaching of the '1517 patent in equating feature 20 of Figure 1 therein with the piston-actuated wedge of the present invention. As discussed above, feature 20 of Figure 1 of the '1517 patent is described in detail in the '349 patent and comprises an air jet to open the mouth of an open-mouth (no closure) bag, which is then grasped by an articulated finger that is inserted into the open mouth of the bag. The Examiner has not presented art which describes or suggest disengaging a closure by inserting therein a wedge. This information can only be learned from reading applicant's specification. Accordingly, obviousness over the cited art can only be found by combining the teaching of the present application with those of the cited art and moreover reading the cited references with impermissible hind-sight interpretation in

view of the disclosure of the present application. Accordingly, in view of the arguments presented above, the cited art can not support a prima-facie finding of obviousness, and the Examiner is requested, respectfully, to withdraw the rejection and reconsider the claims.

With regard to the Examiner's rejection of claim 4 and 12 as being obvious over the '571 patent in view of the '396 patent, as discussed above, the '571 patent does not describe or suggest inserting a wedge into zipper closure mechanism to thereby open the closure mechanism. As discussed above, the '396 patent does not supply this missing information. Accordingly, the cited art can not support a prima-facie finding of obviousness, and the Examiner is requested, respectfully, to withdraw the rejection and reconsider claims 4 and 12.

With regard to the Examiner's rejection of claim 5 as being obvious over the '571 patent in view of the '127 patent, as discussed above, the '571 patent does not describe or suggest inserting a wedge into zipper closure mechanism to thereby open the closure mechanism. As discussed above, the '127 patent does not supply this missing information. Moreover, the Examiner has mischaracterized the teaching of the '127 patent in stating that it teaches the provision of a wedge with a width corresponding substantially to the width of a bag (see the present Action at numbered paragraph 6). As discussed above, the '396 patent describes a wedge placed between two disengaged halves of a continuous length of zipper closure which have been intermittently tacked to the edges of a folded web of plastic film. Because of the necessity of fitting between the pattern of tack welds, the disclosed wedge has a width that corresponds to the width of the closure strip and not the width of the bag. The closure strip width is perpendicular to the bag opening width. As such, the cited references can not support a prima-facie finding of obviousness, and the Examiner is requested, respectfully, to withdraw the rejection and reconsider claim 5.

As discussed above, alone or in combination none of the references cited describe or suggest each and every element of the present invention apparatus, as defined in claims

1 to 5 and 10 to 12. Accordingly, the present invention can not be found to be obvious in view of '571 patent in combination with any of the '1517, '349, or '127 patent. The Examiner is therefore respectfully requested to reconsider the claims and pass them into allowance.

The Commissioner is hereby authorized to charge any additional fees required by 37 C.F.R. §1.17 to Deposit Account No. 02-2556 or refund any overpayment to Deposit Account No. 02-2556.

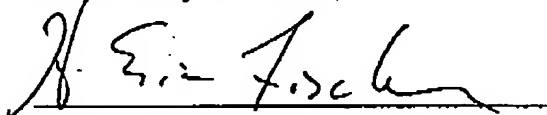
It is respectfully submitted that the present application is in condition for allowance. If the Examiner would like to suggest changes of a formal nature to place this application in better condition for allowance, a telephone call to Applicants' undersigned attorney would be appreciated. No fee is believed to be due in connection with this reply, however, if a fee is due please charge deposit account 02-2556 for any such fee.

CUSTOMER NUMBER

08840

PATENT TRADE-MARK OFFICE

Respectfully submitted,



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